The Milken interview: Readers respond

Toys "R" Us: The growing gets tough

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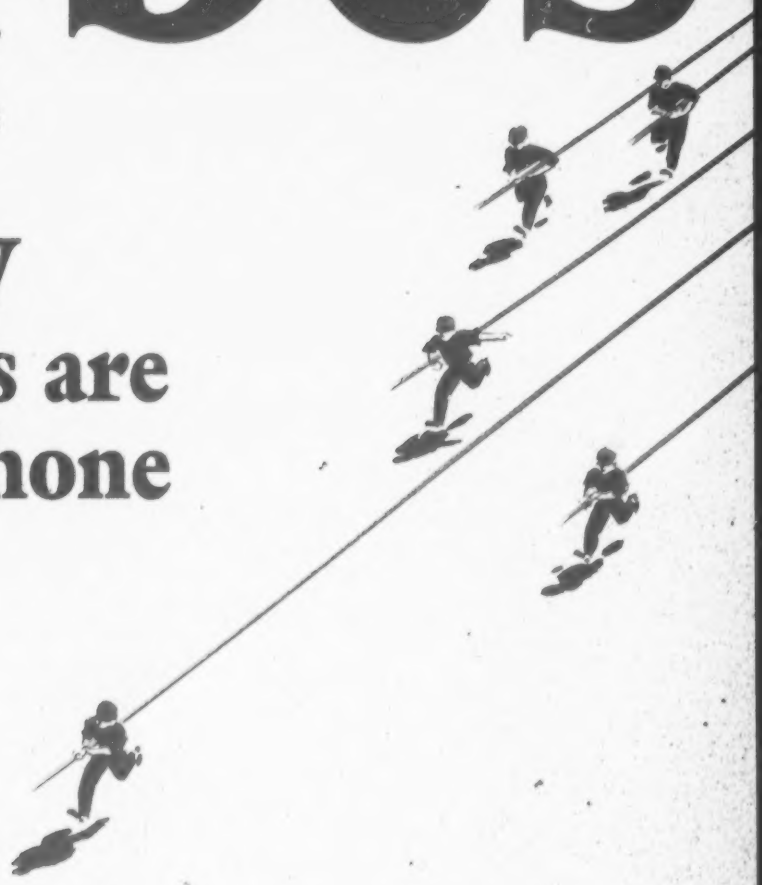
April 13, 1992 Four Dollars

Forbes

The race to wire homes for the digital age

How cable TV entrepreneurs are beating the phone companies



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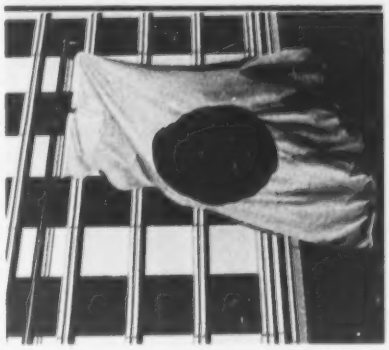
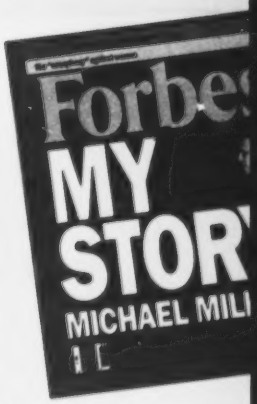
Forbes
APRIL 13, 1992 VOLUME 149 NUMBER 8

Racing to beat the phone companies to supply a full line of telecommunications services to the home.
80

Years of profligate lending and sloppy credit analysis are finally catching up with the Japanese banking system.
42





Readers reply to our Milken story.
66

ON THE COVER

Here Comes Cable 80
By George Gilder
Lots of smart people thought the cable companies would be overrun by the telephone companies. Look who's overrunning whom.

The Milken Letters 66
Was Michael Milken an economic saint or a financial monster? Forbes' readers have their say.

Toys "R" Us: The Growing Gets Tough 68
By Seth Lubove
Toys "R" Us faces its toughest battle yet from the discounters. So what makes it worth 30 times flat earnings?

COMPANIES/INDUSTRIES

National Bank Of Detroit 52
By Marcia Berss
Started during the Great Depression, National Bank of Detroit never forgot that loans can go bad.

Valero Energy 54
By Claire Poole
Nearly bust in the mid-1980s, Valero Energy now seems to be leaving other refiners in the dust.

Living Off Its Past 56
By Kathryn Harris
Add Columbia Pictures' television unit to all the things the Japanese overpaid for during the 1980s.

Up & Comers: Thor-Lo Inc. 60
By Gretchen Morgenson
Meet James Throneburg, inventor of the measurably better athletic sock.

Up & Comers: Sam & Libby Inc. 62
By Zina Sawaya
Why this hot new shoe company is the best kind of revenge.

Fisher-Price 70
By James R. Norman
Ron Jackson fixes up a toy company. But for what purpose?

General Motors 92
By Jerry Flint
GM will build an Opel minivan for Europe in a U.S. plant.

Ashland Oil 102
By James Cook
Why the company's profits are a good deal less volatile than before.

General Signal 106
By Seth Lubove
Comeback story: focusing on "dull" businesses.

INTERNATIONAL

Finance *Shokku* 42
By Dyan Machan, Peter Fuhrman and Andrew Tanzer
Japan's banks are in far worse shape and their problems will take longer to correct than most people believe.

An Election That Matters 46
By Peter Fuhrman
If Britain's Labor Party wins the election, all European labor unions will rejoice.

The Birdman Of Bangkok 86
By Andrew Tanzer
Thai billionaire Dhanin Chearavanont is at the center of an upheaval in Asian diet and distribution.

MONEY & INVESTING

Will The Bears Laugh Last? 44
By Matthew Schifrin
Short-sellers are so devastated that some are turning bullish—and if that's not a bearish sign, what is?

Taxing Matters: Out Of Touch 45
By Laura Saunders
Nearly all the congressmen most responsible for writing the new tax code don't do their own taxes.

Bob Brennan Bounces Back 48
By Gretchen Morgenson
Penny stock scamster Robert Brennan is back in the news, buying a big stake in Bally Manufacturing.

Statistical Spotlight: Piggybank Stocks 98
By Gilbert Steedley
Here are 15 stocks whose high dividends promise superior downside market protection.

"When I think about where we were five years ago, where we are now is simply remarkable."
68

"We'll be the largest feedstuff, chicken and prawn producer in the world."
86

That flowery glass paperweight you found in grandma's attic just could be worth thousands.
122

The Funds: Royce's Turn? 133
By Mary Beth Grover
Why the year ahead will probably be a good one for value-oriented managers like Charles Royce.

The Funds: How Well Did Your Annuity Do? 134
By Eric S. Hardy
High fees make variable annuities second-rate performers.

The Forbes Index 40
The Forbes/Barra Wall Street Review 131
World Markets Review 132

Streetwalker 144
IBP, Inc.; Brunswick and Outboard Marine; Ply Gem Industries; Mercantile Bancorp.; Boatmen's Bancshares.

LAW AND ISSUES

Numbers Game: Buyer, Do Thy Homework 47
By Roula Khalaf
As initial public offerings continue to flood the market, watch out for companies that dress up their numbers.

Motivated Seller 58
By William P. Barrett
Who says bureaucrats can't use smart marketing techniques to move unwanted merchandise?

MARKETING

Pass The Sugar 90
By Norm Alster
Forget bran, fiber and other supposed cholesterol beaters. Cereal makers get back to basics.

COMPUTERS/COMMUNICATIONS

Crashware 110
By Jeffrey Young
How former Livermore scientist John Hallquist is battling his former colleagues over market share. Also: Commentary by Richard A. Shaffer.

SCIENCE & TECHNOLOGY

The Unbundling Of America 118
By Peter Huber
New technologies will disassemble the giant corporations into much more efficient parts.

PERSONAL AFFAIRS

No Fun On The Caribbean 120
By A. Gary Shilling
The wrong crew on a chartered yacht can ruin the best-laid plans.

Collectors: Weighty Weights 122
By Christie Brown
That old paperweight holding down your bills just might pay them off.

Careers: Doing Well And Loving It 126
By John H. Taylor
Richard Kagan yearned to be in show biz; his father wanted him to get into a real business. Both got their wish.

FACES BEHIND THE FIGURES

James Burke 128
Merrill Lynch Capital Partners
Dennis Gilbert 128
A baseball player agent
James Womack 129
Author and auto expert
Roger Horchow 129
Producer of "Crazy For You"

COLUMNISTS

The Larger Context 79
Michael Novak
Observations 94
Thomas Sowell
Capital Markets 137
Ben Weberman
Portfolio Strategy 138
Kenneth L. Fisher
Wall Street Irregular 139
Mark Hulbert
Market Trends 140
Frederick E. Rowe Jr.
Business Strategy 141
John Rutledge

DEPARTMENTS

Side Lines 10
Follow-Through 14
The Informer 20
Readers Say 22
Fact and Comment 25
Other Comments 30
Commentary 35
What's Ahead For Business 39
Flashbacks 147
Thoughts 148

Editorial index is on page 6

Cover illustration by Min Jae Hong

COMPANIES IN THIS ISSUE

Forbes

EACH REFERENCE IS TO THE FIRST PAGE OF THE STORY IN WHICH THE COMPANY NAME APPEARS.

A

Aetna Life & Casualty, 134, 139
Alcan Aluminium, 110
Allegheny, 133
Alltel, 98
Ameribanc, 144
AMR, 39
Anchor National, 134
Anderson & Strudwick, 144
Annapolis, 120
Arbor Acres, 86
Arch Mineral, 102
Arizona Republic, 14
Armstrong World Industries, 98
Ashland Coal, 102
Ashland Oil, 102
Ashton-Tate, 110
AT&T, 80, 114
Atlantic Richfield, 139

B

Baccarat, 122
Bally Gaming International, 48
Bally Manufacturing, 48
Bank of Tokyo, 42
Barnett Banks, 144
Bell Atlantic, 80
Beverly Hills Sports Council, 128
Blue Bird Body, 128
Boatmen's Bancshares, 144, 145
The Body Shop, 22
Boeing, 39
Bonnie Doon, 60
Booth & Flinn, 147
Borg-Warner, 128
Borland International, 110
Boston & Sandwich, 122
Breed Automotive, 110
Brite Voice Systems, 47
British Petroleum, 139, 140
BroadBand Technologies, 80
Brunswick, 144
Burlington, 60

C

Cablevision of Loudoun, 80
Cablevision Systems, 80
Canadian Bank Note, 20
Canon, 106
Capital Cities/ABC, 56
Capital Growth Management, 47
Cargill, 86
Caribbean Sailing Charters, 120
W.I. Carr, 132
Carrington Laboratories, 44
Carsey-Werner, 126
CBS, 56, 139
CCC Franchising, 48
Central Point Software, 114
Chanel (Pamerco), 62
Charoen Pokphand Group, 86
Chefs International, 48
Chester, 86
Child World, 68
Christie's International, 122
Chrysler, 92, 129
Cincinnati Bell, 98, 139
Citicorp, 66, 98, 139
CMS Energy, 139
Coastal, 54, 139
Columbia Pictures Entertainment (Sony), 56
Comcast, 80
Compaq Computer, 114
ConAgra, 86
Connecticut Mutual Life Insurance, 126
Consolidated Freightways, 44
Continental Cablevision, 80
Continental Grain, 86
Control Data, 110
Adolph Coors, 110
Corning, 80, 122
Cox Enterprises, 80
Cray Research, 110
Crown Publishing Group, 22
CRSS, 139
Cruising World, 120
Crystal Brands, 139
CS First Boston, 42

D

Dai-Ichi Life Insurance, 42
Daishowa Paper, 42
Daiwa Securities, 137
Dayton Hudson, 68
Delta Air Lines, 39
Diamond Shamrock, 140
Digital Equipment, 44, 80, 114, 139
Digital Products, 48
Discovery Networks, 80
Dodge & Cox Stock, 138
Dow Chemical, 23, 98
Dow Corning, 23
Downtick Partners, 44
Drexel Burnham Lambert, 66
Du Pont, 98
Duff & Phelps/MCM Investment Research, 98

E

Jack Eckerd, 128
Emerson Electric, 106
Engineering Systems International, 110
Enquirer, 66
Enron, 54
Equitable Life Assurance, 134
ESPN (Capital Cities/ABC), 80
Esprit de Corp, 62

F

Fairchild, 139
Fiat, 92
Fidelity funds (FMR), 133, 134
First Capital, 134
First Chicago, 144
First Jersey Securities, 48
First of America Bank, 98
Fisher-Price, 70
5-Star Brand, 86
FootJoy, 60
Ford Motor, 26, 46, 92, 98
Foreign Affairs, 26
Forstmann Little, 80
Fox Broadcasting (News Corp), 56
Fox River, 60
Franklin Mint, 122
François-Charles Oberthur Group, 20

G

Gabelli Funds, 138
Garan, 98
GE, 110, 147
Gem Antiques, 122
General Atomics, 110
General Foods (Philip Morris), 90
General Mills, 70, 90
General Motors, 52, 92, 98, 110, 118
General Signal, 106
Gerber Products, 138
Goldman, Sachs, 98
Gould Pumps, 106
Great American Recreation, 48

H

Halliburton, 139
John Hancock, 134
Harper's Bazaar, 62
Hartford Steam Boiler, 98
Hartwell funds (JMH Management), 133
Harvard University Press, 94
Hasbro, 70
Helmerich & Payne, 133
Hermès, 122
Hewlett-Packard, 114
Hibbitt, Karlsson, Sorensen, 110
HMS Compass Rose, 14
Holt Advisory, 139
Honda Motor, 86, 92, 129, 141
Hughes Aircraft (General Motors), 147
Hyatt, 20

I

IBM, 80, 114
IBP, 144
IDD Information Services, 47
Industrial Bank of Japan, 42
Information Resources, 90
Interlego, 70

April 13, 1992
Volume 149
Number 8
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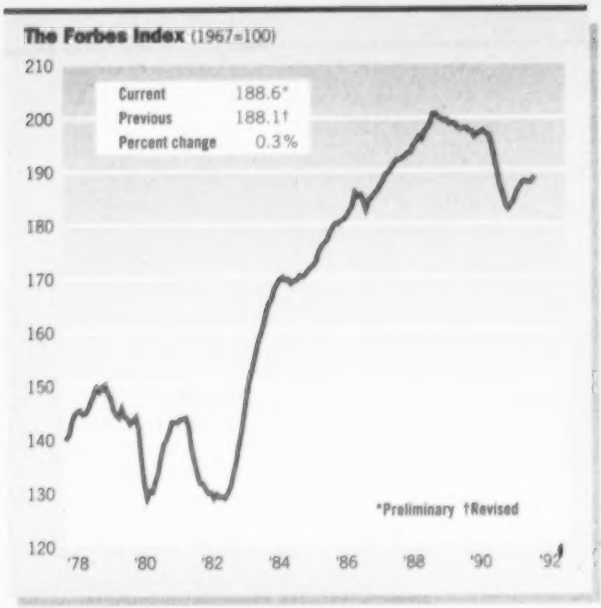
THE FORBES INDEX

BY TIMOTHY DODMAN



A mild uptick in sales of U.S.-built autos—from a low base—contributed to a 0.6% gain in February industrial production. One year ago the Gulf war kept U.S. consumers away from auto showrooms. Still, the rise in industrial production was the first gain in three months. Average monthly unemployment claims are still increasing, but if the manufacturing rebound is genuine, it should eventually lead to new jobs. The Federal Reserve has expanded the money supply, but both consumer and producer price increases have been minimal.

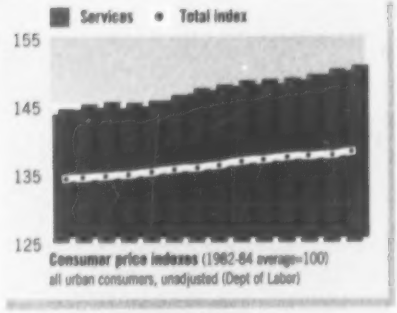
Other key rates	Source	Status
Prime rate	Chase Manhattan Bank	6.5%
Auto sales year to date vs 1991[1]	Ward's Automotive	2.6%
Index of leading indicators Jan vs Dec	Dept of Commerce	0.9%
Trade balance 12 months ended Jan 1992	Dept of Commerce	-$71 bil
All-commodity producer price index Feb vs Jan[2]	Dept of Labor	0.4%
GDP 4th quarter vs 3rd—annualized growth	Dept of Commerce	0.8%
M2 (3-month change)—annualized growth[3]	Federal Reserve	4.4%

[1] U.S.-based manufacturers, excludes imports, as of 3/10/92. [2] Wholesale goods. [3] Includes M1 (public currency and checking deposits) plus savings accounts and money market funds.

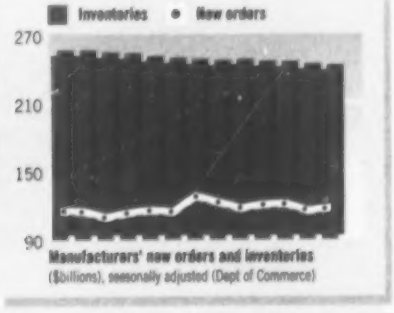
Index components

The Forbes Index is a measure of U.S. economic activity composed of 8 equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, new housing starts, total retail sales, the level of new orders for durable goods compared with manufacturers' inventories, personal income, total consumer installment credit.

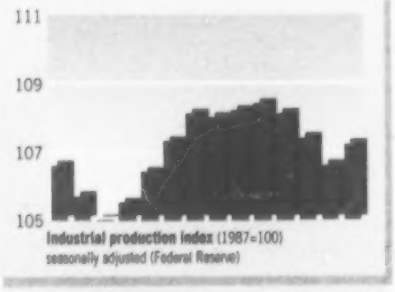
To measure these 8 elements, FORBES monitors 10 series of U.S. government data. The last 14 months' data for each series are presented below.



Consumer price indexes (1982-84 average=100) all urban consumers, unadjusted (Dept of Labor)

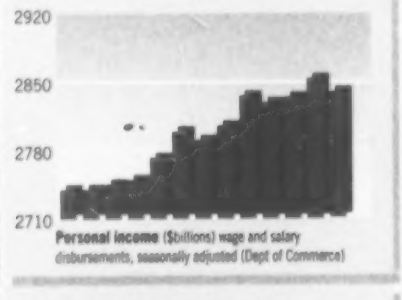


Manufacturers' new orders and inventories ($billions), seasonally adjusted (Dept of Commerce)



Industrial production index (1987=100) seasonally adjusted (Federal Reserve)

New housing starts (thousands) privately owned, unadjusted (Dept of Commerce)



Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept of Commerce)

New unemployment claims average for month (thousands), seasonally adjusted (Dept of Labor)

Retail sales ($billions), seasonally adjusted (Dept of Commerce)

Consumer installment credit ($billions) total, seasonally adjusted (Federal Reserve)

J F M A M J J A S O N D J F J F M A M J J A S O N D J F J F M A M J J A S O N D J F

Lots of smart telecommunications people thought the cable companies were dinosaurs that would be overrun by the telephone companies. But look who's overrunning whom.

Cable's secret weapon

By George Gilder

IMAGINE that you're watching a film just ordered up over one of a cable television system's dozens of pay-per-view channels. The phone rings, but you don't reach for the phone. You reach for the TV remote control unit. Hitting the pause/mute button to stop and silence the film, you take the call through the remote unit, which has become a wireless portable phone. Your phone bill next month bears the name not of the local phone company but of your local cable company.

The CATV companies taking on the phone companies? Wasn't it supposed to be the other way around? Weren't the well-heeled telephone companies going to be the innovators that would lay fiber-optic wires and deliver movies, newspapers, bill paying, banking and other two-way video services to American homes, and drive the cable companies to the wall?

So a lot of people, this writer included, thought. We were wrong.

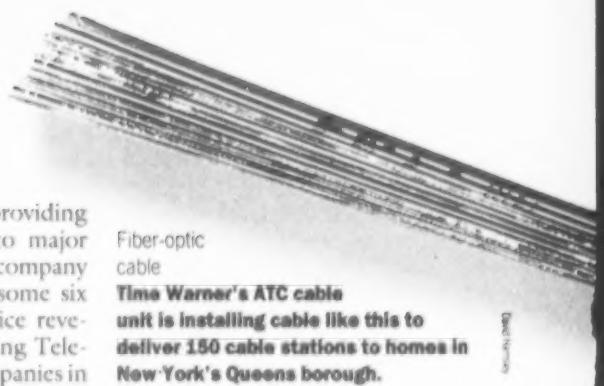
One of the most significant telecommunications deals occurred on Feb. 18. That's when Tele-Communications Inc., the country's largest cable operator *(see table, p. 84)*, agreed to buy 49% of Teleport Communications Group, Inc. from Merrill Lynch; the balance will be held by another cable firm, privately owned Cox Enteprises, Inc. Teleport has built up a $100-million-a-year business by interconnecting major buildings and corporations with fiber-optic cable and linking customers to other phone networks—thereby often bypassing the local telephone companies and their exorbitant switching charges.

Teleport, in short, brings TCI and Cox into direct competition with local phone companies in providing data transmission services to major corporations. With phone company data service revenue rising some six times faster than voice service revenue, TCI and Cox will be using Teleport to attack the phone companies in one of their most profitable areas.

This wasn't the first incursion by a CATV company onto telephone company turf, and it certainly won't be the last. As TV market development manager of fiber-optic cablemaker Corning Inc., Jon Chester knows something about the strategies and ambitions of the various telecommunications competitors. "The cable TV industry," says Chester, "is changing from being a video entertainment source to being a full-service telecommunications supplier."

The cable TV companies already enjoy a substantial lead over the telephone companies in the race to put smart wires into U.S. households. Currently, 60 out of every 100 American homes are hooked up to cable TV; another 33 can easily be hooked up. By contrast, the telephone companies have pushed their wires into 93% of U.S. households.

But those penetration figures are misleading. What matters is not the quantity of wire but its quality—how much data can be passed through the wires, and how easily. On this score, the cable TV companies are far out in front of the telephone companies.



Fiber-optic cable

Time Warner's ATC cable unit is installing cable like this to deliver 150 cable stations to homes in New York's Queens borough.

The arteries of a cable TV system are the coaxial cables that run from the center of the system, the so-called headend, out to subscribers' homes. Over long distances, coaxial cable is not a very efficient conduit of electronic impulses; it is far inferior to fiber-optic cable. About every quarter-mile, coaxial cable requires an amplifier to boost the signal and compensate for resistance on the line. These amplifiers create electronic noise and virtually prohibit efficient two-way communications on coaxial cable. Because of this limitation, most pay-per-view CATV systems and the various shopping channels depend upon both cable and telephone companies: Customers see the video programming via cable, but they order films or merchandise over the phone.

Over short distances, however, coaxial cable is a highly efficient data conduit. Over stretches of 300 feet or less into the home, coaxial cable requires no amplifiers. Thus, across the so-called drop—the distance from the

General Instrument's Remote 'N Phone **This wireless phone/remote control unit will allow couch potatoes to take and make calls through their cable system without leaving the couch.**

curbside cable into the living room—coaxial cable can now handle as much data as fiber-optic cable, and far more than phone companies' conventional twisted-pair copper wires can transmit.

In telecommunications industry jargon, coaxial cable over short distances is what is called a "broadband pipe"—a conduit through which huge amounts of data can flow at enormous speed. Through a broadband pipe, for example, the entire contents of the Library of Congress could flow in under eight hours. To send the same quantity of information by modem over a conventional telephone line would require 500 years.

To get a bit technical, information moves through air or through metal or glass cables in waves. Cable capacity is measured in frequency or bandwidth: the number of waves (or hertz) passing through the line per second. Current, in-place coaxial cable systems have a potential bandwidth of 1 billion hertz (1 gigahertz). Compare this with the 4,000 hertz (4 kilohertz) capacity of current twisted-pair phone company wires.

The point is this: The telephone companies' existing narrowband copper wire links to homes can normally hold only voice and data. But CATV's coaxial broadband links to the home can act as conduits for billions of bits of full-motion digital video, high-resolution medical images, vivid educational simulations and lifelike videoconferences. Comparing the two wires is like comparing a five-car ferry with an eight-lane bridge.

Here's an example of what consumers can already receive through the cable operators' broadband pipes:

Through a service called X*press, from TCI spinoff Liberty Media Inc., cable subscribers can plug their personal computers into their CATV system's coaxial cable outlet and receive a huge flow of digitized data. Suppose, for example, you want to know what is being written about IBM and where the stock closed. Using software from X*press, you set your computer to tune in this news from a data flood pouring in over your cable line from 35 news wires. Likewise for stock quotes, movie reviews, weather reports, horoscopes and a great deal else.

Gerald Bennington, president of X*press, says the service is designed primarily for computer users in the home, not office, and is priced accordingly: from $4.95 per month for a Prodigy-like service, with weather reports and stock quotes, to around $25 per month for a wider variety of services, including more sophisticated investment news. Ultimately, some experts believe X*press will be able to keep pace with centralized on-line database services like Dow Jones or Dialog at a fraction of the price.

Haven't the telephone companies installed much more fiber-optic cable than the cable companies? Yes, they have. But the cable companies are increasing their base more rapidly. CATV fiber mileage has doubled every year since 1988, and will hit 22,000 miles by year-end. While telephone companies today devote around 7% of their investment budget to fiber optics, the cable industry invests more like 15% of its capital budget in fiber.

More important, the cable companies get more bang for every mile of fiber they lay. Look at the diagram on page 82. Traditionally, CATV systems have expanded using a tree-and-branch structure: A single coaxial trunk cable is laid starting at the headend; tributary cables run off this trunk line into neighborhoods.

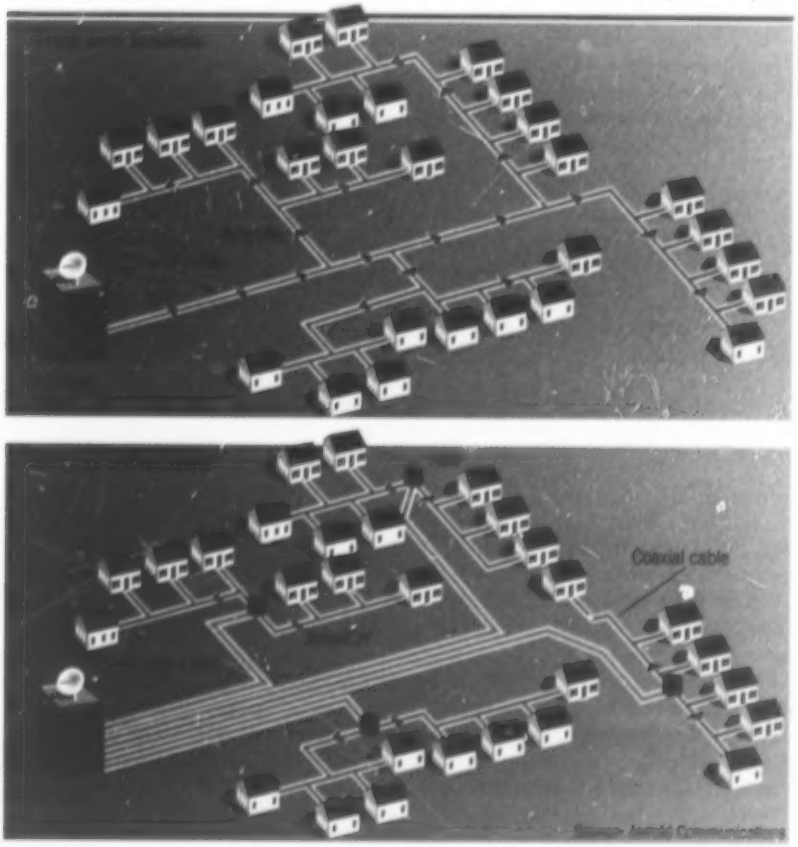
Recently, however, the most advanced cable operators have been breaking up their tree-and-branch systems into what are called "star" configurations. In a star configuration, the operator installs separate fiber-optic lines from the cable headend at the center of the star to neighborhood A. Once there, the broadband fiber-optic cable can connect into the existing broadband coaxial pipes serving a few hundred of neighborhood A's homes. Then the operator moves on to neighborhood B and so on, financing each phase of the upgrading as he proceeds, without serious interruption to the existing service.

Remember coaxial cable's Achilles' heel—all those amplifiers needed to boost the signal over long distances? By installing fiber-optic cables from the cable headend to clusters of homes and tying the fiber into the neighborhood coaxial system, the ca-

ble operator can deliver a data-rich 1-gigahertz signal using just a few—or even no—amplifiers. Eliminating those amplifiers opens the network for two-way traffic that can be switched at the cable system's headend, like a phone system.

Now compare the cable operator's position with that of the telephone companies. To achieve the same level of service upgrade, the telephone company would have to make the same investment in fiber trunk lines—and it would have to make an additional, and heavy, investment in replacing its 4-kilohertz copper wire links into customers' homes and offices. As long as the twisted-pair copper connections remain, phone company fiber does not substantially improve the bandwidth of service to the home. To put it another way: There's no point in sending a tidal wave of information down a broadband fiber line and into the neck of a tiny bottle.

In short, a cable system can turn itself into a supplier of a wide range of broadband services, including wireless phone and computer video, at relatively light cost. According to American Television & Communications Corp., Time Warner's primary (4.6 million subscribers) cable operation, the trunks-and-feeders part of a cable network makes up only 19% of the financial value of cable-installed base. Remaining in place are the most expensive parts of the cable system—those broadband coaxial pipelines from neighborhood hub to home. These lines comprise 75% of the dollar value of CATV plant. (The other 6% is the headend or the central community organization point.) This high cost of installing new broadband links to the home is why ATC Senior Vice President James Chiddix says: "We [in the U.S. cable industry] have spent the last four decades putting a broadband transmission medium into the local loop. That is an exceedingly difficult thing for potential competitors to replicate."



By using fiber-optic cable to reconfigure their tree-and-branch coaxial cable architectures (above) into "star" networks (below), cable operators can do away with most of a system's noisy amplifiers while leaving costly links to the homes in place.

In December ATC rolled out the country's most ambitious fiber-based cable system, in Queens, in New York. In the first phase, available now to some 10,000 Queens households served by new fiber-optic trunk lines, Time Warner offers 150 channels. These include 90 conventional cable channels—MTV, Discovery, ESPN and the like—and 60 pay-per-view movie channels over which it sells films at prices from $1.95 to $4.95 each. Price for this greatly expanded standard service: $23.95 a month—no more than basic cable.

But this is merely a first step. Time Warner plans to push its fiber-optic cables still deeper into the neighborhood, and to transform the system from one based on the flow of information in analog form—like the waves found in nature—to one based on digitized information bits.

What will that mean for ATC and its subscribers? More choice for subscribers, more revenues for Time Warner. Says Chiddix: "We'll be able to provide a different mix of 200 digital channels to each group of 500 homes. This should be sufficient capacity, when combined with 75 channels of basic 'broadcast' services, to allow us to provide individually switched video to individual homes."

When that happens, probably within the next four years, the age of narrowcast information will have truly arrived. "Individually switched video" means the individual viewer tells the programming vendor what he or she wants to see and when, rather than tuning in based on a vendor's schedule. With individually switched video in place, one parent, say, might participate in an interactive college reunion teleconference; another parent might watch a basketball game between her alma mater and an obscure rival; a teenager might study physics with a Caltech professor, while another undergoes diagnostic tests for a torn knee with a specialist across the country. All simultaneously.

Science fiction? Based on Time Warner's work, other cable company ventures and scores of phone compa-

American Television & Communication's James Chiddix **Working on individually switched video: interactive programming when the consumer wants it, not when the vendor schedules it.**

ny experiments across the country, individually switched video for millions of Americans will be widely available before the end of the decade.

As they move closer toward outright competition with the telephone companies, the relatively lightly regulated cable companies enjoy another advantage over the rich-but-regulated phone companies: They are still mostly run by the innovative entrepreneurs who built most of the big CATV firms, people like TCI's John Malone and Cablevision Systems' Charles Dolan. Indeed, it was because these entrepreneurs responded quickly to competitive threats like direct broadcast satellite television and video stores in the 1980s that the CATV industry has invested so heavily in upgrading its systems.

Congress and the courts continue to hobble the telephone companies on the grounds that they are local monopolies. Thus the phone companies generally cannot own cable franchises in their own service areas, nor have they been allowed, until recently, to get into electronic publishing. This plays nicely into the cable entrepreneurs' hands, giving them time to explore parts of the telephone business before the companies can get into their business.

For example, TCI is partnering with McCaw Cellular to develop wireless phone service using cable. Using TCI's broadband links, McCaw can connect lightweight cordless phones to the cellular hub and from there to the local and long distance phone networks. It's a nifty sharing of resources. McCaw, which used to be in cable, provides the phone service, marketing and billing; TCI (whose John Malone is on McCaw's board) supplies the vital broadband connections necessary to carry the signals from scores of wireless phones possibly clustering at unpredictable places.

Another big cable company, Ralph Roberts' Comcast Corp., has been investing in cellular telephones since 1988. On Mar. 5 this year, Comcast plunked down another $1 billion to

LEFT: John Malone of TCI
BELOW: X*press' Gerald Bennington **TCI spinoff Liberty Media's X*press: using coaxial cables to feed home computers with investor and other information for $25 monthly.**

Who's who in cable: the public top five

Name	Number of subscribers (millions)	Operating cash flow 1991 ($mil)	Cable as % of operating cash flow 1991	Cash flow per share 1991	Debt ($bil)	Recent price	5-year high	5-year low	Other cable-related investments
Tele-Communications Inc[1]	11.3	$1540E	95%	$3.67E	$9.7	16	22	8	Turner Broadcasting, Discovery Channel, UK cable systems
Time Warner Inc	6.7	2630	39	24.50	8.8	106	193	66	Turner Broadcasting, Whittle Communications, E! Entertainment Channel
Comcast Corporation[1]	2.8	309	92	2.40	1.7	16	19	7	QVC, Turner Broadcasting, UK cable systems
Jones Intercable[2]	1.7	49	100	4.00	0.3	12	17	6	None
Cablevision Systems Corp	1.6	269	100	12.00	2.2	30	47	9	Rainbow Programming Enterprises

[1]Includes subscribers to Storer Cable, owned 50% by Comcast, 42% by TCI. [2]May fiscal year annualized for calendar 1991. E: Estimate.
Source: Moran & Associates.

These companies serve half the 55 million cable subscribers in the U.S.

buy Philadelphia's nonwireline cellular franchise, thus becoming the first U.S. company to own cable and cellular systems in the same market.

There is cooperation as well as competition between the cable and telephone companies. Examples:

- TCI is joining US West and AT&T in a Denver test of video-on-demand, supplying the viewer's choice of 2,000 movies within minutes.
- U.S. phone and cable companies are combining to provide a variety of communications services all over Europe, where cross-ownership prohibitions do not apply. US West, for example, has invested in cable in France, Hungary, Sweden and Norway, and has teamed up with TCI to supply joint cable and phone service in the U.K. to 2.9 million homes.
- In Washington's Virginia suburbs, Cablevision of Loudoun is linking with Bell Atlantic and innovative BroadBand Technologies, Inc. of Raleigh, N.C. in an ambitious digital video trial resembling Time Warner's plans for Queens. This joint venture enhances picture quality, provides on-screen menus and automatically reports line trouble.

Through its fiber and coaxial lines, the cable industry is also becoming a force in computer networks, the fastest-growing part of the computer industry. As the computer industry moves from simple text communications to images and multimedia, the telephone companies have often failed to keep up by offering lines of sufficient bandwidth to transmit large amounts of digital data required by video and graphics.

Digital Equipment Corp. senior consultant James Albrycht tells a revealing story. DEC wanted to link its headquarters with employees' personal computers at home. DEC decided to use Ethernet, a fast local area network system normally confined to individual buildings. But DEC's local phone company, Nynex Corp., was unable to provide the broadband digital lines Ethernet required.

Stymied by Nynex, Albrycht turned to his local cable provider, Cablevision Systems. He discovered not only that Cablevision's fiber/coaxial cable network could supply ample bandwidth between DEC's offices and employees' homes but also that Cablevision's switching structure was more suitable for Ethernet than the telephone company's switching systems were. "It was a simple overlay," Albrycht recalls. "We had Ethernet up and running [on Cablevision's network] in four days."

Under the name of Community Multimedia Networking, Digital is planning other networking systems across the country, using CATV systems for videoconferencing, video store-and-forward, file transfers, video mail and other value-added telecommunications services.

Curiously, Wall Street is unimpressed by the CATV companies' technological lead and enormous commercial opportunities. Despite the strong stock market, most of the publicly owned cable companies are trading at sizable discounts from their 1989 highs *(see table)*. Perhaps this is because investors fear Congress will decide to re-regulate cable. Or perhaps it is because the entrepreneurs who run the cable companies are less interested in reported earnings than in maximizing asset values by borrowing and investing heavily and paying minimal taxes.

Still, some smart money has been flowing quietly into cable. In 1990 Forstmann Little & Co. and its limited partners paid approximately $1.6 billion for General Instrument, the cable industry's chief supplier of capital equipment. And last month the partners at investment bankers Lazard Frères paid $400 million for 19% of heavily indebted Continental Cablevision Inc., a Boston-based operator with 2.9 million subscribers.

Are the partners at Forstmann and Lazard right about cable? Impossible to know. Telecommunications technology is changing with incredible speed. The heavily capitalized telephone companies could make a fast comeback, especially if Congress and the courts deregulated them. But Congress first seems inclined to add to cable's regulatory burdens. And the computer companies—where entrepreneurial vitality is high and there is no regulation—will also arise as serious competitors in creating digital information networks.

One thing, however, is already clear. The telephone, television and computer are rapidly merging into a single, very intelligent box—a telecomputer. This telecomputer will be linked to the rest of the world by high-capacity smart wires. As things now stand, the cable companies have moved these broadband wires closer to homes and offices than anyone else. ■

THE FORBES/BARRA WALL STREET REVIEW

BY ERIC S. HARDY

The market is off to a slow start in 1992. To date, the total return (including reinvested dividends) on the Barra All-US index is under 1%.

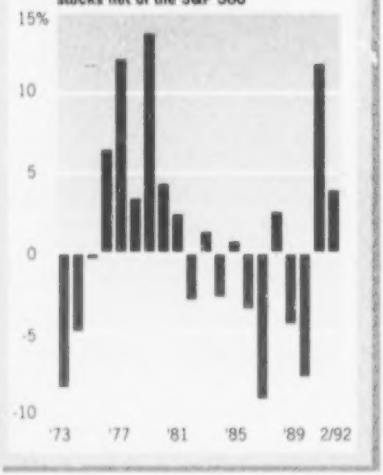
One sector of the market that certainly is not stagnant is the forest products group. Barra's forest products industry factor is up a startling 45% since the start of the year. Reflecting their depressed earnings and the fact that several companies lost money last year, the 21 stocks in Barra's forest industry group are trading at more than 76 times earnings, versus the market's 29.

Prudential Securities' Mark Rogers thinks there is ample justification for the recent performance of these stocks. He cites the dramatic increase in lumber prices—related both to demand from a slowly stirring construction industry and to conservation policies in the Pacific Northwest—as a good reason to anticipate big earnings gains in this industry.

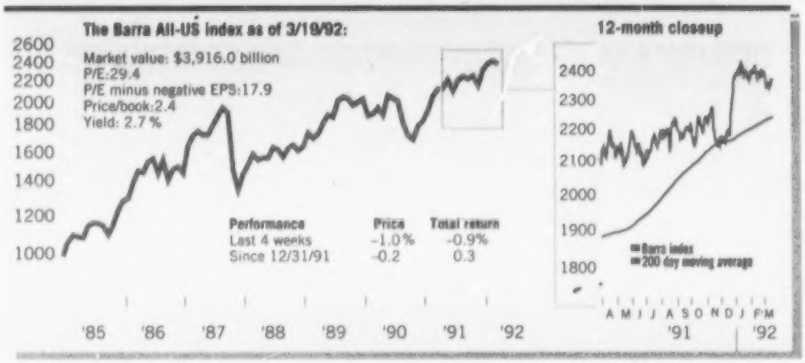
Special focus

After beating the S&P from 1976 to 1981, the Sharpe/Barra Medium Capitalization index (consisting of about 1,000 of the largest stocks outside the S&P) settled down for a decade of mediocre performance. But last year these midsize stocks outperformed the S&P 500 by 12%. The group beats the S&P by 4% so far this year. If market leadership is changing, this may be the start of a new rally in midsize stocks.

Performance of medium capitalization stocks net of the S&P 500



The overall market



Closeup on the market

Index or investment	2-week change	% change from 1 year	% change from 5-year high
Barra All-US index	0.6%	15.3%	-2.8%
Sharpe/Barra Growth index[1]	0.1	15.7	-5.8
Sharpe/Barra Value index[2]	1.5	14.1	-1.0
Dow Jones industrials	0.6	14.2	-0.9
S&P 500	0.8	11.8	-2.6
NYSE	0.6	12.7	-2.4
Nasdaq	0.6	34.7	-2.9
Amex	-2.0	13.9	-4.0
EAFE[3]	-3.2	-11.6	-27.3
CRB index[4,5]	0.7	-3.6	-22.2
Gold[5]	-3.5	-6.7	-32.6
Yen[5]	1.3	-1.5	-18.6
Oil[5]	4.0	-4.2	-53.1

The best and worst performing stocks[6]

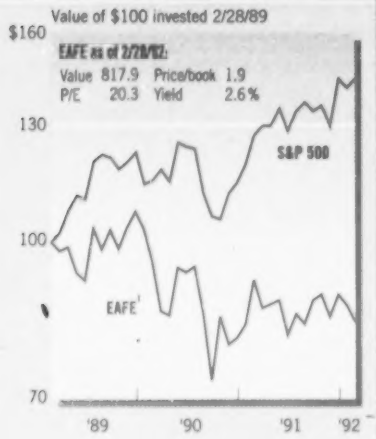
Best	Price	2-week change	1992 EPS[7]	Worst	Price	2-week change	1992 EPS[7]
Qual-Med	20 ¾	32%	$1.50	Chambers Development	10⅜	-68%	$1.06
Oakwood Homes	24 ½	31	1.27	Landmark Graphics	12½	-33	1.26
One Price Clothing Stores	16 ¾	29	0.87	Birtcher Medical Sys	12½	-32	0.53
JB Hunt Transport Svcs	25	26	1.65	Transco Energy	12	-31	1.28
Duty Free International	52 ½	25	1.32	Spartan Motors	23¾	-29	1.34

The best and worst performing industry factors[6,8]

Best	2-week change	Since 12/31/91	Worst	2-week change	Since 12/31/91
Forest products	10.0%	45.5%	Photographic, optical	-9.6%	-20.7%
Motor vehicles	8.1	31.3	Precious metals	-7.6	-10.7
Real estate	6.4	9.6	Oilfield service	-6.4	-19.5
Hotels, restaurants	4.4	17.3	Pollution control	-4.6	-3.0
Trucking	4.2	14.6	Aerospace	-3.9	-8.8

Note: Data for period ending 3/19/92. The Barra All-US index consists of all publicly traded common stocks for which price quotations are available and ordinary shares of foreign stocks trading on U.S. markets. ADRs, REITs and closed-end funds are excluded. [1] Total return of a portfolio of more than 150 large-capitalization stocks that has high historical earnings growth and has predicted above average earnings growth. [2] Total return of more than 300 large-capitalization stocks characterized by low price-to-book ratios, high yields and low price-to-earnings ratios. [3] A dollar-denominated capitalization-weighted index of more than 1,000 stocks from Europe, Australia, New Zealand and the Far East. Source: Morgan Stanley Capital International Perspective. [4] Index of 21 commodity futures. [5] Knight-Ridder Financial Information. [6] During the last two weeks. [7] Estimate. Source: Institutional Brokers Estimate System, from IBES, Inc. [8] Shows return to the industry factor after controlling for other influences including company size, value and growth characteristics. Multi-industry firms have proportional contributions in two or more groups. Principal source: Barra, Inc., Berkeley, Calif.

Foreign vs. U.S. markets



Developed markets

Market	Total return[2] 3 months	12 months	P/E
Hong Kong	23%	49%	14
France	14	8	15
Austria	11	-14	30
Belgium	11	1	12
Germany	11	2	16
Japan	-10	-18	32
Australia	-2	15	17
New Zealand	-2	4	12
Denmark	-2	-4	NM
Canada	1	5	42

Emerging markets[1]

	Total return[2] 3 months	12 months	P/E
Region			
Latin America	17%	135%	NA
Asia	10	20	NA
Country			
Colombia	151	292	27
Brazil	58	163	10
Turkey	44	-33	13
Zimbabwe	-29	-58	7
Korea	-10	-1	18
Chile	-4	76	2

Has Japan's Nikkei hit bottom? Perhaps not. Shuzo Ezura, head of Japanese equity sales at W.I. Carr (America) Ltd., a stock brokerage firm specializing in Asian markets, is pessimistic. Ezura cites Japan's government scandals, political uncertainties and declining corporate earnings.

Hong Kong's 12-month total return of 49% (in U.S. dollars) is the best of any developed market. Chris Thompson, managing director of W.I. Carr, points to the colony's pivotal role in the opening up of trade between southern China and the West. With Hong Kong's economy expected to grow at 7.5% in 1992 and with its large infrastructure development, Thompson thinks this market—which is selling at 11 times estimated 1992 earnings—is still cheap.

Colombia is the best-performing emerging market over the last three months. Hector Chaves, the Bogota Stock Exchange's head of statistics, credits such recent government measures as permitting the creation of domestic institutional pension funds and allowing foreigners to own mutual funds containing Colombian stocks.

Who's hot

Company/Country	Business	Price	3-month price change	P/E
Magna Intl/Canada	auto parts	23	42%	46
Steetley/UK	misc materials	6⅝	40	19
Malayan Banking/Malaysia	banking	3	37	24
New World Devel/Hong Kong	real estate	2	34	18
Club Mediterranee/France	leisure, tourism	96	33	30

Who's not

Company/Country	Business	Price	3-month price change	P/E
Lonrho/UK	conglomerate	2	-47%	8
Tokai Bank/Japan	banking	9⅛	-32	55
Bow Valley Inds/Canada	energy	8½	-32	67
Toyoda Automatic Loom/Japan	machinery	12⅛	-28	25
Alberta Energy/Canada	energy	9	-27	35

Cheap foreign stocks

Company/Country	Business	Price	Earnings	P/E
Banco Bilbao Vizcaya/Spain	banking	28½	$4.41	6
Alcatel Alsthom/France	electronics	109⅜	8.74	13
Unilever NV/Netherlands	food, home prods	101½	7.37	14
SmithKline Beecham/UK	personal care	16⅛	0.84	19
Continental/Germany	tires	147¼	6.78	22

High-yielding foreign stocks

Company/Country	Business	Price	Yield	P/E
T&N/UK	industrial prods	2	12.8%	16
Volmac Software/Netherlands	computer software	15⅝	8.3	12
BASF/Germany	chemicals	153½	8.1	10
Esso/France	energy	123½	7.6	16
Electrabel/Belgium	utility	147	7.5	10

Note: Data for period ending 2/28/92. Selected stocks have a market capitalization of at least $300 million. [1]Shows price return on the EAFE index of European, Australian, New Zealand and Far Eastern stocks converted into U.S. dollars. [2]Performance numbers reflect both local price change and currency fluctuation. Dividends are reinvested after subtracting foreign withholding tax. [3]For period ending 1/31/92. NA: Not available. NM: Not meaningful. Principal source: Morgan Stanley Capital International Perspective. Emerging markets data provided by International Finance Corporation.

whole (as measured by the S&P 500).

Royce likes to buy good companies whose earnings growth has faltered and whose stocks have been hit as the growth crowd flees on bad news. He looks for companies that he thinks can sustain earnings growth of 10% to 15% over several years.

Right now Royce is buying three oil and gas related stocks. One is oil and gas dealer Helmerich & Payne, which, at a recent 21, trades at about book value and at 24 times 1991's depressed earnings of 88 cents a share. Royce expects the company to earn $3 per share by 1995.

Another play is Offshore Logistics, a helicopter operator serving the oil and gas business. It recently traded at 7½ and its book value is $6 per share; cash alone is $2 a share.

Then there's Vallen Corp., a distributor of industrial safety equipment, including fire extinguishers, goggles and face masks used in the oil and gas industries. Vallen's earnings were flat last year, after previously growing at a 20%-per-year clip. Royce recently picked up the stock at around $21 per share and expects earnings to grow by 15% in 1993.

Another equipment maker Royce likes is Manitowoc, a manufacturer of heavy-lift cranes and ice machines. The company has cut costs, and its order backlog for cranes is climbing. Royce is buying the stock at $21 per share and expects it to earn up to $4 a share by 1995.

Royce says he gets many of his stock ideas from personal observation. He bought into clothing maker State-O-Maine (FORBES, *Nov. 25, 1991*) at $10 after purchasing one of its Nautica windbreakers. Recent price, 24.

When he noticed the proliferation of ads for home equity loans, Royce bought some companies selling a necessary ingredient, title insurance: Allegheny Corp., Old Republic, Fidelity National Financial and Lawyers Title. Gain on his group of title insurance companies: 40%.

If you want to bet on small-capitalization stocks, a small-cap value fund, such as Pennsylvania Mutual or the ones featured in the table, is a safer place to put your money than Hartwell Emerging Growth and other funds whose big gains last year are unlikely to be repeated in the year ahead. ■

A little-known fact about variable annuities is that their performance is second-rate. The problem is the dead weight of high fees.

How well did your annuity do?

By Eric S. Hardy

EVER SINCE the 1986 tax law reduced the tax benefits of Individual Retirement Accounts, investors have piled into variable annuities for tax-deferred investing. Taxes on earnings from a variable annuity are deferred until the holder cashes in the investment or turns age 59½, whichever comes sooner.

Last year variable annuity sales leaped 64%, to $10.7 billion. Some stockbrokers are selling more of these things than they sell mutual funds. Mutual fund sponsors such as Vanguard, Fidelity and Scudder, Stevens & Clark are getting in on the act, too, by teaming up with insurance companies to package new annuity products.

Are investors maybe just a little too eager to buy annuities? It sure looks that way.

This magazine has always been more skeptical than most about tax-deferred annuities (FORBES, *Sept. 2, 1991*). Our objections have been on the grounds that annuities come with steep annual fees, which are likely to cut deeply into performance over the long pull.

We can now back up those objections with hard data covering a meaningfully long measurement period, courtesy of Morningstar, the Chicago fund-rating firm. Annuity performance is indeed weak.

The table opposite tells the story. This is a ranking of five-year results for the 20 largest equity annuities, ranked by assets five years ago. Average performance of these big pools: a compound annual 9.4%, considerably worse than the 11.2% you could have had investing in an index fund. Tax deferral, it seems, comes at a price.

That 9.4% annual return, moreover, doesn't even incorporate sales loads. These loads usually come in the form of back-end surrender charges that start as high as 7% and usually fall to zero within seven years. On top of this, people who cash out before age 59½ pay a 10% federal tax penalty on profits.

Don't expect your stockbroker to tell you about the disappointing real-world results of the average annuity. No disclosure law compels him to. If he's trying to sell you one of the annuities that happen to have an excellent record, such as Equitable's Aggressive Stock portfolio, you'll be told about its record. But you won't be told about how flukish that record is. Note that only 3 of the 20 variable annuities in the table beat the Vanguard index fund.

Even averages can be deceptive to look at. Suppose you tried to get a fix on how well the average annuity did by looking at the largest portfolios as of the end of the performance period, rather than the beginning. That list would be very different from the one shown, and the numbers would look a lot better: an average compound annual return of 10.6%.

But this average has an upward bias. It's the best performers that are most likely to make their way onto the second list, both because the performance boosts the portfolio and because winners tend to attract new

The costs outweigh the benefits

Fund/sponsor	City, state	1991 assets ($mil)	Performance* 1 year	Performance* 5 years annualized	Annual expenses per insurance	Annual expenses $100 other
Equitable Equi-Vest Aggressive Stock/Equitable	New York, NY	$508	49.7%	18.0%	$1.34	$0.51
Security Benefit Variflex Income-Growth/Security Benefit	Topeka, KS	300	24.9	11.8	1.20	0.86
Anchor National Pathway II Growth/Anchor National	Los Angeles, CA	541	18.5	11.3	1.30	0.62
Equitable Equi-Vest Common Stock/Equitable	New York, NY	991	17.6	10.8	1.49	0.40
Hancock Accommodator Stock/John Hancock	Springfield, MA	174	11.3	10.7	1.00	0.30
Aetna VA Account C Variable/Aetna	Hartford, CT	2,035	13.2	10.5	1.25	0.30
MFS/Sun Compass 2 Capital/Sun Life of Canada (US)	Boston, MA	383	21.6	10.3	1.30	NA
Anchor National ICAP II Growth/Anchor National	Los Angeles, CA	212	23.5	10.2	1.40	0.90
Prudential VIP-86 Common Stock/Prudential	Newark, NJ	70	15.8	9.5	1.20	0.52
Security Benefit Variflex Growth/Security Benefit	Topeka, KS	157	20.3	9.3	1.20	0.87
Lincoln National Multi-Fund Growth/Lincoln National	Fort Wayne, IN	590	11.0	9.2	1.00	0.77
Anchor National Pathway II Growth-Income/Anchor National	Los Angeles, CA	650	14.2	8.6	1.30	0.59
First Capital VIP Equity Fund/First Capital	San Diego, CA	107	21.8	8.5	1.22	0.91
New York Life Facilitator Common Stock/New York Life	New York, NY	91	22.9	8.4	1.75	0.27
Lincoln National Multi-Fund Special Opp/Lincoln National	Fort Wayne, IN	133	20.1	8.3	1.00	0.77
Mutual of America Separate Acct 2 Stock/Mutual of America	New York, NY	41	12.0	8.1	1.00	0.50
Best of America IV/Nationwide Common Stock/Nationwide	Columbus, OH	92	23.7	7.7	1.30	0.53
Travelers Universal Annuity Growth/Travelers	Hartford, CT	333	11.0	7.2	1.25	0.32
MFS/Sun Compass 1 Mass Capital/Sun Life of Canada (US)	Boston, MA	32	8.6	6.1	1.30	NA
VALIC Separate Acct A Mid Cap Index/Variable Annuity Life	Houston, TX	91	11.7	4.0	1.00	0.67
Vanguard Index-500 Portfolio/Vanguard Group	Valley Forge, PA	3,044	15.7	11.2	none	0.19

*Total return through February 1992. NA: Not available.
Source: Morningstar.

In 1986 these were the largest variable stock annuities, based on asset size. Even factoring in the tax-deferral feature, the long-term performance of these annuities does not justify their popularity.

customers. A kind of self-fulfilling prophecy sets in.

The prospectus always says, "Past performance is no guarantee of future results." Take this to heart. Past performance is scarcely even an indicator of future results. Put little stock in it, unless the record stretches back over several market cycles and was compiled by a fund manager who is still around. Unfortunately, that rules out much of the variable annuity industry, which took off only after the 1986 tax act.

Still interested in tax-deferred annuities? If so, pay a lot of attention to fees and expenses. Annual expense deductions go a long way toward explaining why the typical large annuity underperformed Vanguard's index fund by almost two points a year, as shown in our table.

Most of the annual fee takes the form of an insurance premium, a so-called mortality charge. Remember that these products come wrapped in a thin veneer of insurance, in order to maintain their favored tax status. With these annuities, the life insurance guarantees that if you die before cashing in the annuity, your heirs will get the higher of the annuity's current value or the amount you originally invested.

If you happen to be very sick and planning to invest in a very volatile portfolio, this guarantee is worth something to you. Otherwise it's not worth much.

The two annuities from Sun Life (Canada) on this list charge a stiff 1.3% of assets annually as a mortality charge. For $13,000 a year—the fee on a $1 million investment—you can buy a lot of life insurance and buy a fund that does not levy an insurance premium.

Massachusetts Financial Services, the Sun Life subsidiary that manages those annuities, will not disclose the underwriting results of its mortality charges. "We consider that proprietary information," says Massachusetts Financial Services spokesman John Reilly.

And remember this: The earnings on the investment are not tax-exempt, just tax-deferred. Your broker may forget to figure in the taxes due at withdrawal when illustrating the tax advantages.

Annuities can be a wise investment, but the conditions have to be just right. You have to keep your expenses low, and you have to be pretty sure you can hang in long enough for the tax deferral to amount to something—usually about ten years. And you have to be certain you won't need the money before you reach the age of 59½. Fees are bad enough; tax penalties are dreadful.